



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/672,304	09/26/2003	Young-Je Cho	8071-47 (OPP 030615 US)	4451
22150	7590	07/12/2005	EXAMINER	
F. CHAU & ASSOCIATES, LLC			DUONG, TAI V	
130 WOODBURY ROAD			ART UNIT	
WOODBURY, NY 11797			PAPER NUMBER	

2871

DATE MAILED: 07/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SM

Office Action Summary	Application No.	Applicant(s)	
	10/672,304	CHO ET AL.	
	Examiner	Art Unit	
	TAI DUONG	2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 2, 12 and 15-21 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13 and 14 is/are allowed.
- 6) ☒ Claim(s) 1, 3, 4 and 8-11 is/are rejected.
- 7) ☒ Claim(s) 5-7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Applicant's election with traverse of Species A and C (claims 1, 3-11, 13 and 14) in the reply filed on 04/25/05 is acknowledged. The traversal is on the ground(s) that the search and examination of the entire application could be made without serious burden. This is not found persuasive because the search and examination of two inventions including five species would cause a serious burden on the examiner, not taking into account that new claims with newly recited features of the five species might be added later in subsequent amendments. Examination includes consideration of the prior art, determination of the compliance of the specification and the drawings with respect to the rules, the compliance of the claims with respect to 35 USC 112, first and second paragraphs, etc.

The requirement is still deemed proper and is therefore made FINAL.

Claims 2, 12 and 15-21 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to nonelected species, there being no allowable generic or linking claim.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Ishihara et al.

Note Fig. 2A which identically discloses the claimed panel assembly for a display device, the panel assembly comprising a plurality of spacers formed on the panel for supporting the panel, wherein the spacers (5a, 5b, 6b) have at least two different heights or at least two different contact areas with the panel, the spacers comprising a first spacer 6b, a second spacer 5b having a height lower than the first spacer, and a third spacer 5a having a height equal to or lower than the second spacer

Claims 1, 3, 4 and 8-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Byun et al.

Note Figs. 5-10 which identically disclose the claimed panel assembly for a display device, the panel assembly comprising a plurality of spacers formed on the panel for supporting the panel, wherein the spacers (201, 202, 203) have at least two different heights or at least two different contact areas with the panel, the height difference between the first spacers and the second spacers being in a range of about 0.3-0.6 microns (paragraph 0058), the spacers comprising a plurality of first spacers and a plurality of second spacers having a height lower than the first spacers and having a contact area wider than the first spacers (Fig. 5), the spacers comprising a first spacer, a second spacer having a height lower than the first spacer, and a third spacer having a height equal to or lower than the second spacer (Fig. 10), the height of the

Art Unit: 2871

third spacer being equal to the height of the second spacer (Fig. 9). See discussions of the remaining recited features in paragraphs 0009 and 0051-0061.

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Claims 1 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Satoh.

Note Fig. 9B which identically discloses the claimed panel assembly for a display device, the panel assembly comprising a plurality of spacers formed on the panel for supporting the panel, wherein the spacers (43, 44) have at least two different heights or at least two different contact areas with the panel, the panel comprising a plurality of color filters (23, 24, 25) having different thicknesses (col. 9, line 20 – col. 10, line 27).

Claims 5-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 5-7 are allowable because none of the prior discloses or suggests a panel assembly having structure as recited in claim 3 *in combination* with the feature “wherein the second spacers have a length larger than the first spacers by 10-20 microns”, “wherein the second spacers have a length in a range of about 30-35 microns and the first spacers have a length in a range of about 15-20 microns”, or “wherein a concentration of the second spacers is about 200-600/cm² and a concentration of the first spacer is about 250-450/cm²”.

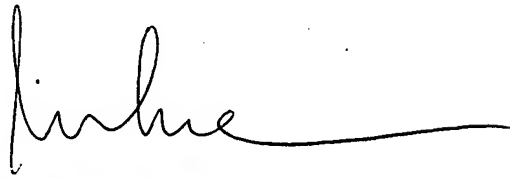
Claims 13 and 14 are allowed because none of the prior discloses or suggests a method of manufacturing a liquid crystal panel assembly, the method comprising the steps of coating a photoresist on a panel; light-exposing the photoresist through an exposure mask including an opening and disposed on the panel with a first distance; light-exposing the photoresist through the exposure mask disposed on the panel with a second distance; and developing the photoresist to form first and second spacers having different heights or different contact areas with the panel.

As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication should be directed to Tai Duong at telephone number (571) 272-2291.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


DUNG T. NGUYEN
PRIMARY EXAMINER

TD
TVD

07/05